Amendments to the Claims

The following Listing of Claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An optical information reproduction device, comprising:

an information recording medium that includes a recording unit having a multilayer structure of recording layers capable of recording information three-dimensionally and from which can be reproduced information recorded on one of the recording layers through any of the other recording layer or layers and provided with a track having a specific track pitch, with which information is recorded by forming a plurality of recording marks along the track of the recording unit by a mark length recording method, and when the track direction of the recording marks is assumed to be their longitudinal direction and the direction perpendicular to the track direction is assumed to be their lateral direction, for recording marks located substantially in the same plane, the total area of elongated recording marks, whose longitudinal length is greater than their lateral length, is greater than the total area of recording marks having other than elongated shapes;

a first semiconductor laser light source for emitting reproduction light having a wavelength λ_1, and for emitting recording light with a wavelength of λ_2 different from the wavelength λ_1;

an objective lens for focusing the reproduction light emitted from the first semiconductor laser light source on the recording unit of the information recording medium, and for focusing the recording light on the recording unit of the information recording medium; and

a first photodetector for detecting a reproduction signal from the reflected light from the recording unit,

wherein the information recording medium has a track pitch of no more than 1.3 times the wavelength λ_1 of the reproduction light, ~~and~~

the first semiconductor laser light source has a characteristic such that it emits the reproduction light in which an amplitude of a polarized light component that is polarized perpendicular to the track direction is greater than that of other polarized light components[[.]], and further comprising

an optical component that functions so as to convert the state of polarization of the recording light emitted from the first semiconductor laser light source, whereby the amplitude of a polarized light component of the recording light that is polarized perpendicular to the track direction is caused to be greater than that of other polarized light components compared with the state of polarization before the conversion.

2. (Previously Presented) The optical information reproduction device according to Claim 1, wherein the polarized light component of the reproduction light focused on the recording unit is linearly polarized light that is polarized perpendicular to the track direction of the information recording medium.

3. (Previously Presented) The optical information reproduction device according to Claim 1, wherein the polarized light component of the reproduction light focused on the recording unit is elliptically polarized light whose main component is a polarized light component that is polarized perpendicular to the track direction of the information recording medium.

4.-10. (Canceled)

11. (Currently Amended) The optical information reproduction device according to Claim [[22]] 1, wherein ~~the first semiconductor laser light source further emits recording light with a wavelength of λ_2,~~

~~the objective lens focuses the recording light on the recording unit included in the information recording medium,~~

~~the wavelength λ_1 of the reproduction light is different from the wavelength λ_2 of the recording light, and~~

~~said optical information reproduction device further comprises another optical component, located along the optical path between the first semiconductor laser light source and the objective lens, for switching between~~ the optical component functions so as to convert, by utilizing the difference in wavelength, a polarization state of reproduction light emitted from the first semiconductor laser light source and a polarization state of recording light emitted from the first semiconductor laser light source, ~~and for utilizing this difference in wavelength~~ so that the amplitude of a polarized light component of the reproduction light focused on the recording unit that is polarized perpendicular to the track direction will be greater than that of other polarized light components compared with the state of polarization before the conversion, and so that the recording light focused on the recording unit will be circularly polarized light.

12. (Currently Amended) The optical information reproduction device according to Claim 11, wherein the ~~another~~ optical component functions substantially as a $\lambda_1/2$ integer multiple plate with respect to the reproduction light, and functions substantially as a $\lambda_2/4$ plate with respect to the recording light.

13. (Currently Amended) The optical information reproduction device according to Claim [[11]] 1, wherein ~~the first semiconductor laser light source further emits recording light with a wavelength of λ_2, and~~

the wavelength λ_1 of the reproduction light is shorter than the wavelength λ_2 of the recording light.

14. (Currently Amended) The optical information reproduction device according to Claim 1, wherein ~~the first semiconductor laser light source further emits recording light with a wavelength of λ_2, and~~

the recording light is pulsed light, and information is recorded by using nonlinear absorption.

15. (Original) The optical information reproduction device according to Claim 1, further comprising a pinhole plate that is disposed along the optical path between the

information recording medium and the first photodetector, and has a pinhole that transmits light conveying target information included in the reflected light.

16. (Original) The optical information reproduction device according to Claim 1, wherein a surface area of a light-receiving component provided in the first photodetector is set to an area over which light conveying target information included in the reflected light is received.

17. (Original) The optical information reproduction device according to Claim 15, further comprising a second photodetector for detecting focus/track error signals, and a focus/track error signal detection element that is disposed along the optical path between the information recording medium and the second photodetector, for splitting the reflected light,

wherein at least one of the beams split apart by the focus/track error signal detection element is guided to the second photodetector without passing through the pinhole.

18. (Original) The optical information reproduction device according to Claim 1, wherein the recording marks are voids.

19. (Original) The optical information reproduction device according to Claim 1, wherein the recording marks are recording pits produced by refractive index changes.

20.-23. (Cancelled)

24. (Previously Presented) An optical information reproduction device, comprising:

an information recording medium that includes a recording unit having a multilayer structure of recording layers capable of recording information three-dimensionally and from which can be reproduced information recorded on one of recording layers through any of the other recording layer or layers and provided with a track having a specific track pitch, with which information is recorded by forming a

plurality of recording marks along the track of the recording unit by a mark length recording method, and when the track direction of the recording marks is assumed to be their longitudinal direction and the direction perpendicular to the track direction is assumed to be their lateral direction, for recording marks located substantially in the same plane, the total area of elongated recording marks, whose longitudinal length is greater than their lateral length, is greater than the total area of recording marks having other than elongated shapes;

a first semiconductor laser light source for emitting reproduction light having a wavelength λ_1;

an objective lens for focusing the reproduction light emitted from the first semiconductor laser light source on the recording unit of the information recording medium; and

a first photodetector for detecting a reproduction signal from the reflected light from the recording unit;

wherein the information recording medium has a track pitch of no more than 1.3 times the wavelength λ_1 of the reproduction light, and

an optical component is provided along the optical path between the first semiconductor laser light source and the objective lens so as to convert the state of polarization of the reproduction light emitted from the first semiconductor laser light source, whereby the amplitude of a polarized light component of the reproduction light that is polarized perpendicular to the track direction is caused to be greater than that of other polarized light components compared with the state of polarization before the conversion.

25. (Previously Presented) The optical information reproduction device according to Claim 24, wherein the polarized light component of the reproduction light focused on the recording unit is linearly polarized light that is polarized perpendicular to the track direction of the information recording medium.

26. (Previously Presented) The optical information reproduction device according to Claim 24, wherein the polarized light component of the reproduction light focused on the

recording unit is elliptically polarized light whose main component is a polarized light component that is polarized perpendicular to the track direction of the information recording medium.

27. (Previously Presented) The optical information reproduction device according to Claim 24, wherein the first light source further emits recording light with a wavelength of λ_2,

the objective lens focuses the recording light on the recording unit included in the information recording medium, and

the first semiconductor laser light source has a characteristic such that it emits the recording light in which an amplitude of a polarized light component that is polarized perpendicular to the track direction is greater than that of other polarized light components.

28. (Currently Amended) The optical information reproduction device according to Claim 24, wherein the first semiconductor laser light source further emits recording light with a wavelength of λ_2,

the objective lens focuses the recording light on the recording unit included in the information recording medium,

the wavelength λ_1 of the reproduction light is different from the wavelength λ_2 of the recording light, and

~~said optical information reproduction device further comprises another optical component, located along the optical path between the first semiconductor laser light source and the objective lens, for switching between~~ the optical component functions so as to convert, by utilizing the difference in wavelength, a polarization state of reproduction light emitted from the first semiconductor laser light source and a polarization state of recording light emitted from the first semiconductor laser light source, ~~and for utilizing this difference in wavelength~~ so that the amplitude of a polarized light component of the reproduction light focused on the recording unit that is polarized perpendicular to the track direction will be greater than that of other polarized light

components, and so that the recording light focused on the recording unit will be circularly polarized light.

29. (Currently Amended) The optical information reproduction device according to Claim 28, wherein the ~~another~~ optical component functions substantially as a $\lambda_1/2$ integer multiple plate with respect to the reproduction light, and functions substantially as a $\lambda_2/4$ plate with respect to the recording light.

30. (Previously Presented) The optical information reproduction device according to Claim 24, wherein the first semiconductor laser light source further emits recording light with a wavelength λ_2, and

the wavelength λ_1 of the reproduction light is shorter than the wavelength λ_2 of the recording light.

31. (Previously Presented) The optical information reproduction device according to Claim 24, wherein the first semiconductor laser light source further emits recording light with a wavelength λ_2, and

the recording light is pulsed light, and information is recorded by using nonlinear absorption.

32. (Previously Presented) The optical information reproduction device according to Claim 24, further comprising a pinhole plate that is disposed along the optical path between the information recording medium and the first photodetector, and has a pinhole that transmits light conveying target information included in the reflected light.

33. (Previously Presented) The optical information reproduction device according to Claim 24, wherein a surface area of a light-receiving component provided in the first photodetector is set to an area over which light conveying target information included in the reflected light is received.

34. (Previously Presented) The optical information reproduction device according to Claim 32, further comprising a second photodetector for detecting focus/track error signals, and a focus/track error signal detection element that is disposed along the optical path between the information recording medium and the second photodetector, for splitting the reflected light,

wherein at least one of the beams split apart by the focus/track error signal detection element is guided to the second photodetector without passing through the pinhole.

35. (Previously Presented) The optical information reproduction device according to Claim 24, wherein the recording marks are voids.

36. (Previously Presented) The optical information reproduction device according to Claim 24, wherein the recording marks are recording pits produced by refractive index changes.

37. (Previously Presented) The optical information reproduction device according to Claim 24, wherein the optical component functions substantially as a $\lambda_1/2$ integer multiple plate with respect to the reproduction light.

38. (Previously Presented) The optical information reproduction device according to Claim 24, further comprising a second semiconductor laser light source for emitting recording light with a wavelength of λ_2, wherein

the objective lens focuses the recording light on the recording unit included in the information recording medium, and

the second semiconductor laser light source has a characteristic such that it emits the recording light in which an amplitude of a polarized light component that is polarized perpendicular to the track direction is greater than that of other polarized light components.

39. (Currently Amended) The optical information reproduction device according to Claim 24, wherein the first light source further emits recording light with a wavelength of λ_2,

the objective lens focuses the recording light on the recording unit included in the information recording medium, and

the optical component also functions so as to convert ~~switch~~ the state of polarization of the recording light emitted from the first semiconductor laser light source, whereby the amplitude of a polarized light component of the recording light that is polarized perpendicular to the track direction is caused to be greater than that of other polarized light components.

40. (Currently Amended) The optical information reproduction device according to Claim 24, further comprising a second semiconductor laser light source for emitting recording light with a wavelength of λ_2, wherein

the objective lens focuses the recording light on the recording unit included in the information recording medium, and

another optical component is provided along the optical path between the second semiconductor laser light source and the objective lens so as to convert ~~switch~~ the state of polarization of the recording light emitted from the second semiconductor laser light source, whereby the amplitude of a polarized light component of the recording light that is polarized perpendicular to the track direction is caused to be greater than that of the other polarized light components.